

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference PHUS030283WO	FOR FURTHER ACTION	See item 4 below
International application No. PCT/IB2004/051567	International filing date (<i>day/month/year</i>) 26 August 2004 (26.08.2004)	Priority date (<i>day/month/year</i>) 26 August 2003 (26.08.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant KONINKLIJKE PHILIPS ELECTRONICS, N.V.		

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 <i>bis</i> .1(a).																								
2.	This REPORT consists of a total of 8 sheets, including this cover sheet. In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 30%;">Box No. I</td> <td style="width: 80%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input checked="" type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44 <i>bis</i> .3(c) and 93 <i>bis</i> .1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44 <i>bis</i> .2).																								

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Date of issuance of this report 27 February 2006 (27.02.2006) Authorized officer <div style="text-align: center; font-weight: bold; font-size: 1.2em;">Idhir Britel</div>
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PATENT COOPERATION TREATY

REC'D 22 DEC 2004

WIPO

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From the
INTERNATIONAL SEARCHING AUTHORITY

3/3

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/IB2004/051567

International filing date (day/month/year)
26.08.2004

Priority date (day/month/year)
26.08.2003

International Patent Classification (IPC) or both national classification and IPC
H04L12/28, H04L1/00

Applicant
KONINKLIJKE PHILIPS ELECTRONICS, N.V.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1b/s(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2004/051567

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/IB2004/051567

Box No. II Priority

1. ☒ The following document has not been furnished:
- ☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).
 - ☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).
- Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.
2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. ☐ It has not been possible to consider the validity of the priority claim because a copy of the priority document was not available to the ISA at the time that the search was conducted (Rule 17.1). This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.
4. Additional observations, if necessary:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-12
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-12
Industrial applicability (IA)	Yes: Claims	1-12
	No: Claims	

2. Citations and explanations

see separate sheet

Reference is made to the following documents

D1: EP 1225736 A2
D2: WO 95/12265 A1
D3: US 2002/0056125 A1

A. Remarks made in respect of clarity (Article 6 PCT) of the claims:

1. The formulation "greater than the segregation circuit allocates for more important data" in **claims 2 and 8** leaves the reader in doubt as to the meaning of the technical features to which it refers (see e.g. description, page 4, line 21: "greater than **the length** etc."), thereby rendering the definition of the subject-matter of said claims unclear, Article 6 PCT.
2. The formulation "based at least in part **of** the fragmentation threshold parameter" in **claims 2 and 8** leaves the reader in doubt as to the meaning of the technical features to which it refers (see e.g. description, page 2, lines 12-13: "based at least in part **on** etc."), thereby rendering the definition of the subject-matter of said claims unclear, Article 6 PCT.

B. Citations and explanations made in respect of paragraph V:

The above clarity objections notwithstanding, the application does not meet the requirements of the Article 33 PCT for the following reasons:

1. **Document D1** discloses (see in particular [0002]-[0006], [0024]-[0026], [0029]; [0032]; [0040]; [0049]-[0050] and figure 2), according to the **principle of claim 1**, a wireless communication device (see in particular figure 2 and [0025]: "wireless LAN") comprising an input terminal configured to communicate data with a processor (see in particular figure 2 and [0024]: "computer" and [0025]: "embedded CPU"); a memory (see in particular [0025]: "memory") configured to store at least one parameter relevant to the wireless communication protocol (see in particular figure 2, [0025]: "cooperate with MAC", and [0006]: "parameter...fragmentation level") and a modem coupled to the memory and configured to communicate using a wireless protocol over a wireless channel (see in particular figure 2, [0025]: "wireless LAN", "conventional modulation"), including a framer configured to fragment the data (see in particular [0006]: "fragmentation")

based at least in part on the at least one parameter stored in the memory (see in particular [0006]: "parameter...fragmentation level" and [0049], lines 31-32: "parameter Db", "number of data bytes...in each packet").

- The subject-matter of **claim 1** differs from that of **D1** in the features of
- a) a **segregation circuit** coupled to the input terminal and configured to identify predetermined data and to separate more important data from less important data
 - b) the modem being coupled also to the **segregation circuit**
 - c) the framer fragmenting the **segregated** data

However, segregation circuits used to separate more important data from less important data are normally known in the art, as shown e.g. in **D2** (see in particular page 1, lines 5-27: "digital data of different classes", "multimedia", "voice, video, data"; page 2, lines 8-24; page 4, line 34 to page 5, line 26 : "individually buffering...packets of digital data according to their priority in...assigned buffers"; page 6, lines 6-11; page 7, lines 20-35; page 8, lines 4-10; page 9, lines 8-13; page 11, lines 34-37; page 12, lines 9-25), related to a similar digital communication device as in **D1**. Furthermore, **D2** also explicitly discloses applying fragmentation to the segregated data (see in particular page 12, lines 17-19: "fragmentation").

Consequently, merely adding the features of a segregation circuit, e.g. as shown in **D2**, to the communication device of **D1** with a corresponding coupling to its modem and a corresponding fragmentation of the segregated data, would merely represent a straightforward implementation choice for the skilled person.

Thus, the subject-matter of **claim 1** lacks an inventive step (Article 33(3) PCT).

2. The same considerations as made in paragraph B-1 above are also valid for independent **claim 7**, since its subject-matter corresponds to the features of **claim 1** claimed with reference to a method.

Consequently, the subject-matter of independent **claim 7** also lacks an inventive step (Article 33(3) PCT).

3. Dependent **claims 2 to 6 and 8 to 12** do not contain any additional features which, in combination with the features of any claim to which they refer, meet the

requirements of the Article 33(3) PCT in respect of **inventive step**, because they are either derivable **in principle** from the cited documents or merely represent implementation details obvious to a person skilled in the art of data transmission. In particular:

- a) **Claims 2 and 8** : Obvious implementation choice, directly derivable from **D2** (see in particular page 7, line 24: "low priority packet is fragmented" and page 12, lines 14-25: "a fragment may include the entire packet or some part of..depending upon...fragmentation"; "priority packets always contain the entire user packet", "priority packet should be length limited").
- b) **Claims 3-6 and 9-12** : Minor technical details normally known in the art, see for example **D3** (see in particular [0011] : "MPEG-2 transport" and [0019]-[0021]: "video packets, data packets, voice packets, control packets")

Therefore, dependent **claims 2 to 6 and 8 to 12** do not meet the requirements of the Article 33(3) PCT.

C. Further remarks made in respect of the present application

When entering the PCT-II phase, the following points should also be taken into consideration:

- 1. The independent claims are not in the two-part form recommended by Rule 6.3 (b) PCT, which in the present case would be appropriate, having a pre-characterizing portion which reflects the closest prior art of document **D1** (Rule 6.3(b) (I) PCT) and with the remaining features being included in a characterising part (Rule 6.3(b)(ii) PCT).
- 2. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the cited documents **D1** and **D2** is not mentioned in the description, nor are the relevant contents of this document discussed therein.
- 3. The claims do not include reference signs related to the technical features referred to therein (Rule 6.2(b) PCT).
- 4. If any amended claims are filed, the opening part of the description should be modified to bring it into agreement with the wording thereof, Rule 5.1(a)(iii) PCT.

5. The vague and imprecise statement in the description on page 5, line 16 ("and spirit of the invention as etc.") implies that the subject-matter for which protection is sought may be different to that defined by the claims, thereby resulting in lack of clarity (Article 6 PCT) when used to interpret them.
6. The attention of the applicant is finally drawn to the fact that the application may not be amended in such a way that it contains subject-matter which extends beyond the content of the application as filed, Article 34(2)(b) PCT. Amendments should be filed by way of replacement pages in the manner stipulated by Rule 66.8(a) PCT.

Moreover, the applicant's attention is drawn to the fact that, as consequence of Rule 66.8 (a) PCT the examiner is not permitted to carry out any amendments under the PCT procedure, however minor these are.